INDIANAPOLIS, SUNDAY MORNING, MARCH 28, 1897-TWENTY PAGES.

RAILWAY MOTIVE POWER

TION OF THE LOCOMOTIVE.

own of the First Model-The Ma-

chine of 1829 and the One of 1897.

there is now a widespread belief that both

were invented simultaneously. Not only is

having preceded that of the locomotive by

fact that the Baltimore & Ohio Railroad,

The engineers in this country were per-

fectly well aware of the importance of

Stephenson's application of locomotives to

the hauling of passengers and freight, as

exhibited by him in 1825, but they doubted

locomotives were applied had tracks at

with them the route of the Baltimore &

Ohio seemed full of curves and grades, and

it was not until Peter Cooper had demon-

strated by means of his model locomotive

that steam power could be safely used to

haul cars around curves of four hundred

feet radius that horses were finally super-

Although Peter Cooper never built a suc-

cessful full-sized locomotive, he is none the

gan building his model on the site of the

present Mount Clare workshops in Balti-

a single cylinder of 31/4 inches in diameter

and a stroke of 1412 inches. Alderman

power was applied to the other axle by

means of a toothed wheel. The strength of

BEATEN BY A HORSE CAR.

On Saturday, Aug. 28, 1830, Peter Cooper

and thirty-nine other persons had a grand

excursion to Ellicott's Mills, thirteen miles

the locomotive, in spite of the frantic efforts

of Mr. Cooper, in which he lacerated his

This was the first and last public perform-

ance of Peter Cooper's locomotive, of

which an account has been kept, but it

nevertheless proved that a locomotive could

keep on the track while rounding sharp

curves. On the following Jan. 4 the direc-

tors of the Baltimore & Ohio Rallroad Com-

pany issued their famous offer of \$4,000 for

ered at their line before the following June

show graphically the hopes and fears of the

railroad men of that day. Summarized,

"That it must not exceed three and one-

The conditions attached to this offer

he engine was one-horse-power.

in 1829, and made several trial trips

cars by horses.

PRICE FIVE CENTS.

WEAR.

Newest Novelties In

Exclusive Patterns at **Moderate Prices**

TATE ARE after the business reputation that gives us the name for dealing in Exclusive Garments of all kinds. If you buy a suit or skirt of us-you won't find everybody in town wearing the same kind of a suit or skirt. Individuality in our Garments is bringing us the success that we are now enjoying.

> We Have the Goods You Must See Them

Boyd, Besten AND Langen Co.

39 East Washington Street.

AN ITALIAN PHILANTHROPIST.

Training Ship for Homeless Boys Established by a Poor Man.

Letter from Genoa, in New York Post. It was on a day of grayness over hills and sea that I drove the half-dozen miles from pretty Nervi into Genoa to visit the training ship and reformatory of Signor Garaventa. The account I had had of this man, poor, busy in his professional duties as teacher of mathematics, with eight children of his own, contriving as founder and director to carry on this admirable work, had given me a great desire to see the ship, that on such and such a day I should find his boat of small sailors in naval uniform in waiting at the Porte Guglielmo at the harbor of Genoa. Sure enough, there they were, and in fine style did they execute orders, swing their oar-blades to the bow, and draw up to the pier to take their benefactor and me on board. The ship lies at anchor about five minutes' row from the shore, an old, disused sailing vessel which

Signor Garaventa bought. Again I was deeply impressed as I had been in the case of the Duchesa Ravieschieri last winter in Naples, with the union of severest common sense with such freshness and exuberance of asm in the philanthropist, with whom I passed an hour learning about his work. The words poured out in a torrent of eloquence, eyes flashed, hands talked quite as eloquently as lips in a series of rapid, vivid gestures, all grace, and with no nervousness, as he told me that in the thirteen years that the ship has been put to this use it has trained one thousand of these small sailors, of whom more than five hundred he knows have done well, while of the others, although, owing to their necessarily wandering life, he can have nothing certain, one or another from time to time turns up from the ends of the earth to re-

port himself. The boys he takes are all under sixteen years of age, some from prison, some children whose parents are prisoners or in reformatories, and some children of women of had lives. In choosing the boys from prison Signor Caraventa takes by preference those who faults are from lack of sense and judgment rather than those of another nature, but he has the courage occasionally to take a boy for his ship who has committed a theft; and even this effort has not been a failure, for the sea purifies. "It mare purifica," he says, and the constant occupation and the companionship of other boys who have no such stain upon them are often cures. Many boys of fairly well-to-do families are there just because their parents have lost control of them through too great indulgence. The boss of the lowest class, after a term of discipline-a term of varied length, sometimes of sixteen months, sometimes of some years are generally put on sailing vessels starting on cruises of three or four years, thus keeping the boys from any chance to return to the old haunts of Genoa in all

Of the children of delinquents Signor Garaventa prefers those whose parents are permanent ipmates of some prison or reformatory, and of these and of the third class some are fitted for navy and some for merchant service. Some choose special careers, as to become engineers, electricians or pilots, and those who are musical have joined the naval military bands. He says there is no talk of prison or arrest on his ship. They are all treated alike and kept always active, with no time to reflect or to plan. On Sundays, as they are of different denominations, aithough in the main Catholics, they go to their own churches-the chief body taken by their officer, but the others going alone to their places of wor- is a word that suggests patched poverty ship. They seem to have no desire to run

Seattle Post. If there is any word more disagreeable than another it is the word "genteel." It and old china dishes with nothing in them. With the true Italian idea that a little fun abominate. It is a word that women like, but that men

whatever you are doing, the boys go on their Festas to entertainments, to which I saw no drill, as there happens to be on sailor's outfit, shouldered their muskets as luted at the word of command, and then stood motionless until we had passed into the saloon. Their life is in every particular later in the navy, and the government sufficiently values this training to supply the the best locomotive which should be delivrepairs to the ship, white when they are at 1. There are thirty of them usually though as the boys go off into the royal navy or elsewhere, the numbers are some-

times less. One large place forward serves night is hung with their hammocks. The and consume its own smoke. tables are slipped in an ingenious way into the beams of the roof, after meals and leshung on great hooks in such a way as to make two tiers of beds in rows. At o'clock in the morning, at a signal, the boys arise, roll up their hammocks into canvas bags and stack them in a space ar-

people see me, they cry: "Ecco, Sig. Gara-

cabbages? Or how should you like some

beans to make soup for your boys?" And

so he fills his basket. Twice a week he is

said, "this must be most anxious work

Aren't you sometimes very fearful that you

may not have things when they are needed?" "Never," he said. "I never lose

half an hour's sleep over it. On Sunday

last they sent me word from the ship that

they had nothing for soup for next day

and no oil and no soap. I wrote back, 'Be

calm. It will all come in time." And by

noon on Monday he had from one gentle

man an order for beans, from another one

for a supply of soap, and so on. An Eng-

lish business firm gives them all their

coal; they are to have a gift of a fine new

stove as soon as the repairs of the ship are

completed, and so it goes. It seems his

people have for generations been in good

works, and Genoa is small enough to allow

a reputation like this to spread and bring

Money is more difficult to procure, and

this good man has waited patiently all

asefulness of his work by making the ship

ike any other and venturing away from

inished he hopes to have the vessel cruise

setween Genoa and Sardinia, thus giving

his young sailors an actual experience of

seafaring before they leave him. Even the

striking generosity of the poor towards one

another is manifest, for many of the la-

horers who come to do the work of

scraping, whitewashing, painting, etc., give

their services gratuitously. Sig. Gar aventa

told me that thirty of these men were com-

ng the next morning to fall to and make

short work of the old shabby paint and

The director's house on the harbor looks

out on his beloved ship, and he tells me

that he is in communication with it by

means of signals, and goes over two or

three times a day, even at 2 or 3 o'clock in

the morning sometimes, to be sure that

watch and guard are doing their duty and

not sleeping at their posts. He has his

there entirely sometimes when his family

is in the country. Such devotion brings its

little cabin there, with writing desk as well

as its sleeping arrangements, as he stays

own reward in kindly sympathy and help

from the community, and especially in the

visible good accomplished each year, and

I have rarely seen a being more aglow with

enthusiasm and more serene in his content

than the good Signor Garaventa, founder

and director of the Nave-Scuola Redenzione

Genteel.

whitewash

When the repairs just beginning are

these years for the means to increase the

with it a universal trust and well-wishing

given meat at the meat market. "But

venta, what will you have to-day?

able to draw fifteen tons at the rate of fifteen miles an hour "That, other things equal, the engine of least weight would have the preference. ranged for the purpose around the sides of "That the wheels should have inside Knowing that Sig. Garaventa had no priflanges, and if coupled should not exceed vate fortune to use for this good work of three feet in diameter, while if not coupled, his, I said: "And do the people give you the single pair of driving wheels should not money for all this?" He replied: money, but the things I actually need. I exceed four feet in diameter. go to the market, accompanied by a mar with a huge basket, and as soon as the

"That the pressure of the steam should not exceed 100 pounds to the square inch. and should be as much below that limit as

'That each engine should have two safety valves out of the engineer's control. "That each engine should have a mercurial gauge to blow out if the steam pres-

sure exceeded 120 pounds, "That the height of the funnel should not exceed twelve feet."

The winner of this contest was Phineas Davis, who called his engine the "York." from York, Pa., where it was built. It was the first of the class known as "grassof this engine have not been preserved, but Under favorable circumstances the "York" ran at as high a rate of speed as thirty run of eighty miles a day. In September, springs on the engine and cars that onethird more load could be hauled with the same effort. Mr. Gillingham, the superin-

horses to haul the same load. DAVIS'S GRASSHOPPERS. Mr. Davis, who had now become the regular builder of engines for the Baltimore & Ohio Company, turned out his second 'grasshopper' engine early in 1833, which he named the Atlantic. The third engine of the same class was named the Franklin. heavier than the "York." In July, 1834, line to Harper's Ferry was at hand, four given to its class to distinguish it from | engines on the main stem.

the "grasshopper" class. On Aug. 25, 1835, the Washington branch which, in view of modern American prac- which Mrs. Helmuth figured prominently, fluctuations, and windiness in the body."

Phineas Davis was killed. He was standing Mr. Hayes was then master of machinery latter can even now be thrown into a on the tender of an engine which ran off for the B. & O., and he determined to build dangerous rage at the mere mention of the CONCISE HISTORY OF THE EVOLU- the track, and was hurled against the fire- some wood-burning engines with inside cyl- New York woman's name. In the matter covered consciousness. This led to the leas- cranks on the driving axles, and as these tion, by the way, had a very palpable air ing of the Mount Clare shops to Gillingham | crank axles are liable to fracture with ex-& Winans, who agreed to furnish the Bal- cessive strain or after long use, American Peter Cooper Is Entitled to the Re- timore & Ohio Company with locomotives | builders have wisely avoided them. In | silks and satins were the rule, and Mr. Edat a stipulated price and to give it prece- splte of this fact Mr. Hayes went ahead dence of all orders from elsewhere.

firm, had been connected with the Balti- engine men had ever seen up to that time. began life on a farm and became connected ameter with a twenty-two-inch stroke. The only motive power on regular railroads that | with the railway through selling its horses. His inventive genius soon displaying itself, motive contest at the Liverpool & Manthough commenced the year after George Stephenson had begun to use a locomotive on the axles of car wheels, thus reducing ed, and the latter, because they were neat regularly on the Stockton & Darlington at a stroke the friction of hauling them and handsome, with plenty of polished may sit here a little while." Mrs. Helmuth Railway, was planned originally for hauling from twelve pounds to a ton to three brass-work.

whether a similar system of traction could | Weight, had a greater drawbar pull than | as illustrated by the ten-wheeled consoliany of the twelve-ton engines made by dated passenger engines at present in use be applied to railways on this side of the once level and straight. In comparison following year the first of the famous the history of the world. feet in diameter, and cylinders seven- pounds to the square inch. They haul the pounds to the square inch, such an engine a mile in thirty-two seconds. As to must have had a drawbar pull of 19,266 strength, one of them has hauled five Blue less entitled to the renown of being the pounds, or enough power for even a good- Line cars from Baltimore to Washington, sized engine of to-day. There were draw- forty miles, in thirty-six minutes. the engines of to-day, but these rods were pass safely around curves. If the bad bal-

> ARMING OF THE CAMEL BACK. Hitherto the Baltimore & Ohio had retricted its orders for locomotives to its local headquarters, but in 1838 four new engines were placed on the Washington branch, which had been built by the William Norris locomotive works, of Philadelphia. These engines were wood-burners with a single pair of driving wheels, and cylinders twelve inches in diameter, with an eighteen-inch stroke. A second pair of the first pair, and it is with this alteration that these Norris engines are now rememroad still living. The Washington branch ing public, as the president of the Baltimore & Ohio, early in 1836, in an official report, says: "The first four months' travel iveraged two hundred persons a day, far exceeding the most sanguine expectations of the road." A two-car train making a

excessive business in these days. On Nov. 5, 1842, the road was opened to Cumberland, and two years later Ross Winans delivered several engines especially was twenty-two tons in weight, and from safely be assumed that all previously built engines must have been considerably

The variety of locomotive still known as the "camel back" was first built by Ross the first thirty-ton engines ever used in any modern class of engines, which shall here at intervals by opening slides worked by lever. The cab was placed on the top of the boiler, and had steps leading from it to a gangway which ran back to the tender. The fireman must have had a dangerous journey to and fro when his "camel back" this engine, as originally built, was not the form of a short piece of duplicate funnel placed directly in front of the ordinary

men of that day was the horizontal cylinders placed in a line with the center of the driving wheels, as is almost universally the case to-day. Before the "camel back" innovation the cylinders had been placed above the center of the driving wheels, and

of course inclined toward them. Yet the "camel backs" had their good points. They could pull trains which other hoppers," and had a vertical boiler and engines could not look at; they could make cylinder. The exhaust steam revolved a fan steam in any kind of weather and with alwhich in turn revolved a second fan most any kind of coal; they never got stuck close to the ash pan by which air was on the up grades as other engines frequentforced up through the fire. The dimensions ly did, and their strength, and constancy in using it, obviated the necessity the cylinders were probably five and a half of occasional helpers. They could haul inches in diameter by sixteen inches stroke. | trains one hundred tons in weight in summer and eighty tons in weight in winter, and keep their scheduled time, over the mountain grades of the Alleghanies. They were stoutly built engines, too, with good material in every part of them, and some 1832, it was found that by placing steel of them, put into service thirty years ago, are still pegging away, much too good to be

relegated to the scrap heap. The Baltimore & Ohio was opened from tendent of motive power, also reported at | Cumberland to Wheeling in January, 1853, that time that the daily expense of the lo- and in preparation for this event and its comotive was \$16, while it cost \$33 using expected large accession of the traffic, seventeen engines were ordered early in 1850, at a cost of about \$150,000. Ross Winans secured the order for ten of these engines, at a cost of \$9,750 apiece, eight more were built by A. W. Denmead, at \$8,500 each, and two from Smith & Perkins, at \$9,500, two from the New Castle Manufacturing Comand both these engines were considerably company at \$8,000, while four were made at the B. & O. shops and charged up at when it was seen that the opening of the \$9,500 each. This little list shows that the price of all classes of engines was between more engines were put in service. Two \$8,500 and \$9,750, and it is a curious fact that the increasing cheapness of material and were built by Davis, the other two greater efficiency of workmanship permits engines of double the weight, and more Baltimore. Some one or more of these en- than the power, to be built to-day for about gines had a horizontal boiler, instead of the same prices. Before these orders were a vertical one, and the name "crab" was given out the B. & O. was using sixty-four

and turned out several of the best propor-Ross Winans, the junior partner in this tioned engines, all things considered, that more & Ohlo road from its inception. He They had cylinders fifteen inches in dicentral driving wheels and trailing wheels, which were coupled, were five feet in dihe was sent to England in 1829, being then ameter. They were at first known as the States, he invented the projecting journals | made steam and kept time if not overload-

Between the era of the "Dutch wagons" Winans have been preserved, but in the and endurance as were never before seen in delegation are seldom all present-there is

plenty of room.' "mud diggers" was turned out at These engines have six coupled wheels, the Mount Clare works. This type six feet six inches in diameter, cylinders of engine had driving wheels three 21x26 inches, and a steam pressure of 170 teen inches in diameter, with a twenty- Royal Blue Line trains, and on many ocfour inch stroke. Assuming that the steam | casions have gone a mile in fifty seconds. pressure in the boiler was one hundred while one of them has been timed covering

rear axle. The six driving wheels were the almost inconceivably rapid rate of one connected by outside coupling rods, as in hundred feet in a second. Think of a livlateral and longitudinal play of the connect- horse to the rein of its rider. There may be ing rods, it may be safely inferred that inventions which are considered more marthe "mud digger" class never was able to velous than the modern high-power locoapply more than half its nominal drawbar motive, but surely none displays in concrete result the power of man to imprison so mighty a force in so small a compass. E. H. M.

MERE PLEASANTRY.

Frances's Coup D'Etat. driving wheels were afterward coupled to source of great annoyance to me, as she bered by some of the early workers on the | small Julia came to visit, and opened conearly became very popular with the travel- planting distress in Frances's breast. Her had 'em-has she?' 'No,' I replied, 'Frances never had whoopin' cough, neither, has daily trip from Baltimore to Washington | she? 'No.' I said. 'Frances hasn't had and back would not appear to be doing an the whooping cough, either. 'An' I've had chickenpox, too, an' Frances ain't never had that, has she?' By a sidewise glance I saw that poor Frances's small face was gown, and whispered energetically: 'Moth-

Juvenile Repartee.

"There is nothing on earth so diverting." time, and the funny things that have happened while our would-be society neighbors really more than ludicrous. One snobbish | thro' the kitchen an allers a-wantin' bread Their bare, unprotected fire-boxes hung family in particular has greatly diverted an' butter, an' allers a-keeping a-body in chutes, through which coal was supplied friendly advances and then have neglected mum?" The portly lady, with keen recolto speak to us when they meet us anywhere. Their rise in life must have been peculiar in some of its phases, for they still, yard. My seven-year-old boy was playing on the sidewalk the other day, when the the rest.' was running at high speed. The beauty of mistress of this society establishment came along. It was muddy and she desired a letenhanced by a spark arrester which took | ter mailed in the box across the street Addressing our youngster she said; 'Little boy, will you put this letter in that letter box? I don't know you, but I suppose you One feature of these socomotives which know who I am.' The mischievous urchin attracted great attention from the engine | tipped his cap, took the letter very politely, and replied: 'Yes'm, I know you, you're the lady that keeps geese."

Miss Euphemia's Mistake. Miss Euphemia admits that she has old-

fashioned ideas. She believes in cold baths taken in a cold room, and she believes in cus. sleeping in a cold room, too. She thinks that we are a deteriorating race because we coddle ourselves too much. One awful- The Doctors Once Considered it ly bitter, blizzardy night in January at bed time Miss Euphemia hung over the fire in the sitting room; it did seem dreadful to go way off to that cold room in the north wing, and go to bed without a fire. Then she had a happy thought-she would take Aunt Serantum's brass warming pan to bed with her. So it was routed out of an old closet, and prepared for the journey. Of course, there weren't any hot coals to but there was plenty of hot water in the kitchen boiler, so Miss Euphemia filled the old warming pan with boiling water and started up to bed. Just how she arranged a pan of hot water in a bed without spilling, nobody knows; but when she got in after a hasty undressing, everything was as cozy and warm as could be wished. In the dead of night, though, Miss Euphemia says she awoke feeling dreadfully. The bed felt queerly, and her teeth were chatgetting wider awake, she discovered icereal ice-in the bed; skating rinks up her warming pan had played her a despicable trick-it had sprung a leak. When Miss Euphemia told her Arctic experiences at the breakfast table a graceless brother reto bed with Aunt Serantum's warming pan you'd better take your skates."

A Club Episode.

the selection of a president at the expiracial grandeur brings to the top an episode of the biennial Club Federation meeting

of the Baltimore & Ohio road was opened | tice would not be termed an improvement, | and in which she so unfavorably impressed for traffic, and on the following Sept. 27 | was made by Samuel Hayes in 1857. | the other club woman concerned that the box with such violence that he never re- inders. As inside cylinders demand forged of gowns and jewels the New York delegaof trying to do themselves proud and outshine their wild and woolly Western sisters; mund Russell had evidently not convinced them that it was vulgar to attend business meetings rigged out in all their diamonds. But, to the episode. It was just after luncheon, and Mrs. Helmuth, in all her vast expanse of satin gown and diamond badges and brooches, occupied the New York seats alone. A club woman from another State, appropriately attired in this not the case-the invention of railroads | thirty-three years old, to witness the loco- | Hayes passenger engines, but were soon | handsome tailor-made cloth suit, and wearnicknamed the "Dutch wagons." Still, they | ing merely the federation pin, entered the at least a hundred years-but it is also the chester Rallway, finally won by Stephen- became very popular with both operatives seat behind Mrs. Helmuth. Wishing to do son's "Rocket." Returning to the United and passengers; the former, because they the proper thing, she leaned forward and said to the great Sorosis president: "These seats are not occupied yet. I suppose I tossed her aigrettes and remarked loftily "These seats belong to the New York dele-As soon as he turned his hand to build- and the mammoth locomotives of to-day, gation-you will find plenty of room in the ing locomotives, Mr. Winans threw himself lie the classes of engines familiar to every gallery." The other club woman was not into his work with characteristic energy. one, because examples of them are still to accustomed to being ordered to the gallery, His first two engines, manufactured in the be found working on every branch road. so, subduing her desire to retort, she fall of 1836, though eight tons each in But the latest example of engine building. promptly adjourned to the adjoining Kentucky seats. "May I sit here a little while?" she asked a Louisville woman. Atlantic. The earliest railways to which | Stephenson in England. No records of on the B. & O. road, brings up such mag- "Certainly," answered the Louisville delethese first two engines built by Mr. nificent concentration of speed, strength gate; "sit here as long as you choose; our

Saved by Insomnia.

Little Tom and smaller Julian had been playing games all Sunday afternoon and their repertoire was about exhausted. Noah's Ark, Jonah and the whale, David all served their turns as entertainment, and the great question was-what to do next. "What shall us play?" asked small | tal with labor.

that the excitement of seeing the "pooty lady" made out of his bones kept him from going to sleep.

The Little Red Boots. "I'm almost sixty years old," remarked

a prominent lawyer, "but I can never look

at a pair of little red-topped boots without a pang. When I was probably six years old which a small river ran, crossed by bridges, One Saturday my father, who was in the main a kind man, but had a violent temper, took me to an adjoining larger town to see the circus he bought me a pair of little red-top boots, and we walked home. I carried the precious boots, one in each hand, admiring them every step of the way. When we crossed the bridge, to my great consternation. I let one of the new boots fall into the water. It went floating down stream at a great rate. My father evidently thought it could not be recovered. At any rate he walked me home at a rapid the other boot in the open wood fire. You can imagine with what heartbreak I saw it turn to ashes. In the morning in came a boatman, bringing the lost boot, which he had found among the weeds at the river's edge. Of course, my grief broke out afresh -my father's wrath broke out afresh also. give me another whipping because the man had found the boot, I suppose, when my grandmother jumped into the breach, carried me off into her bedroom and gave me some dejected peppermint candy out of an old stand drawer. Since that time I have had griefs and have lost valuables, but that awful tragedy of the little red boots has not been obliterated or even perceptibly

dimmed in poignancy." Trying to Please Her.

A portly lady wanted a cook. She had er, mother, tell her I've had the stomach as "upside down," the man of the house was finding fault with his dinners, the children were demoralized. So a cook must be had, and had at once. An applicant called who seemed in every way a desirable acquisition; she looked neat, strong and fairly intelligent and brought good references. The portly lady was ready to close the contract at once, when a decided hesitation appeared on the cook's part. "I dunno, mum," she said. "If I kin help it have been trying to keep from knowing us I don't never go where chil'ren is. Chil'ren lection of the sad state of domestic affairs and the desperate necessity for immediate relief, waved one soot-begrimed hand with strange to say, keep geese in their back a sudden tragic resolve, and elaculated; "How many will you come for? I'll kill all

Just Their Style.

Several small boys in a juvenile Sundayschool class were about to have a change of teacher, and expressed considerable uneasiness lest the newcomer should not be exactly up to their standards. On the Sabbath morning of her first appearance they had to be coaxed to go to Sunday school. but they returned home in jubilant spirits. "Oh, mamma!" they noisily exclaimed in broken chorus, "our new teacher's all right; she's as young and foolish as you are. She lets us talk to her 'bout baseball an' cir-

WATER DRINKING.

Dangerous Practice. Water was in no favor as a beverage in

the sixteenth and seventeenth centuries. Says The Hospital, in discussing this curious feature of old medical opinion: "It needed a very bold man to resist the medical testimony of three centuries ago against water-drinking. Few writers can be found to say a good word for it. One or two only are concerned to maintain that encourage all such enterprises, favors to when begun early in life, it may be pretty freely drunk with impunity, and they quote he curious instances given by Sir Thomas be had, such as they used in old times, | Elyot in his 'Castle of Health,' 1541, of the Cornish men, 'many of the poorest sort which never, or very seldom, drink any other drink, be notwithstanding strong of body and like and live until they be of great ligion, and to discourage whatever tends to age.' Thomas Cogan, the medical schoolmaster of Manchester fame, confessed in his 'Haven of Health,' 1589, designed for the use of students, that he knew some who drink cold water at night or fasting in the morning without hurt; and Dr. James Hart, writing about fifty years later, could even claim among his acquaintances 'somnonorable and worshipful ladies who drink little other drink, and yet enjoy more perfect health than most of them that drink tering like mad-she was having a chill. On | of the strongest.' The phenomenon was undeniable, but the natural inference was none the less to be resisted. Sir Thomas Elyot himself is very certain, in spite of the back and under both feet. Aunt Serantum's | Cornish men, that there be in water | nomical principles, but in any state of socauses of divers diseases as of swelling of the spleen and liver. He complains oddly, also, that 'it flitteth and swimmeth,' concludes that 'to young men, and them that be of hot complexion, it does less harm, and sometimes it profiteth, but to marked: "Well-Phemie-next time you go them that are feeble, old and melancholy it is not convenient.' 'Water is not wholesome cool by itself for an Englishman' was the verdict of Andrew Borde-monk, physician, bishop, embassador and writer on sanitation-as the result of a life's experience. * * * But the most formal indictment against water is that of Venner, who writing in 1622, ponderously pronounces dwellers in cold countries it doth very greatly deject their appetites, destroy the natural heat and overthrow the strength of to discredit religion in the minds of the The next innovation in engine building, in Louisville last May-an episode in the concoction is the cause of crudities, sometimes most insidious, sometimes open.

THE VOICE OF THE PULPIT

SERMON ON THE RELATION OF RE-LIGION TO THE LABOR PROBLEM.

Views of Bishop George Montgomery, Cathedral of St. Vibiana (Roman Catholie), Los Angeles, Cal.

My Dear Friends-I make no secret of the fact that I want to convince you that, at this moment, religion is the thing that concerns you most, both as men and as citizens of this Republic; in fact, that it is your only hope to secure to yourselves the possession and enjoyment of the blessings guaranteed to you by the Constitution and laws of our

Ther is one broad platform on which all of us can stand, no matter what be our religious beliefs, or want of belief, or our political affiliations. That platform is not distinctly either religious or political, though in practice partaking somewhat of both. That platform has two planks, which are, first, loyalty to our country, to its Constitution and its laws, in letter and in spirit; and, secondly, that all who live under its flag must bear their portion of its burdens, and must have equal opportunities of enjoying their share of the privileges and blessings for which the Constitution and these laws were framed.

Though we are only a little advanced in the second century of our history as a nation, there is a widespread feeling that though all bear the burden, not all men possess these opportunities of enjoying the blessings. Various causes are assigned for and Goliath, and Daniel and the lions had | the thing complained of. I believe the simplest way to express it is to say that the difficulty comes from the relations of capi-

I do not intend to enter into any discusparties to the contest, labor and capital, any further than to say that I believe labor equal opportunity with capital, I believe that capital has an undue purchasing power; that whilst legislation and courts of law should stand as the unbiased arbiter between the two, capital is too often able to sway the balance in its own favor and against labor.

I do not acquit labor of all wrong doing, but I believe that when labor does wrong there is usually an extenuating circumstance in its favor; that it is goaded on to it, believing, from past experience, that there is no means of redress except to adopt in times of peace measures that are permitted only in times of war.

Of the whole truth or the full extent of this state of things on both sides I do not pretend to judge. But I assume that the state of things exists. It is a state of violence, and no society can long exist in a state of violence. As a simple citizen I inquire, with others, what is the remedy? The answer ought to be, indeed, "the law." The courts of justice in any land ought to stand for equity between all its citizens.

The idea of our government is to subing of the few. In a word, to bring the ruling power closer to the people, to make the people themselves the ruling power. The legislatures and courts are in the hands of the people themselves, and the people ought surely to conduct their affairs as

they themselves want. That is the theory. But the fact of the matter is, even in the most representative government possible, the work of governing has to be delegated. We all have in our theory of government an equal voice in governing, an equal share in making the legislature, the Congress and the courts. But that equal share has to be delegated. The farmer, the merchant, the mechanic, the tradesman and the professional man have to delegate or name some one to act for them. This we do by our election. But the moment we delegate that function and instruct our representative what we want done we have no more voice, body so delegated. We cannot go into the legislative halls or courts of justice and give any instructions. We must depend upon the integrity and honesty of our delegate or representative.

It is evident, then, there is something anterior to law, to courts, to legislation, to which we must look for proper representation and equity. That something is charac-

over the rear wheels with a downward us. They have borrowed our lawn mower, o' nights, I don't likes to go where they's I say the feeling that capital has the power strong. What is the remedy? Did our forefathers see the danger? They did. Did they provide by law or statute against it? They did not. Why did they not provide a remedy? They could not. It does not lie within the sphere of givil government to provide against ft.

Conscience is formed and character is built up by religious principles. But this government as such has no religion, and cannot have a religion. Yet it is absolutely necessary, and more necessary in our representative government than in any other, that not only the delegate, the representative, be under religious influence, but that the univeral delegating power, the people, be so influenced, for from their ranks the representatives are chosen.

What is the logical and necessary conclusion? It is quite simple. As the state has no religion and can have none, and yet it is dependent upon it for its own very life, it should foster and encourage the private enterprises that teach it, and which try to enforce it upon the individual character and through the individual character to reach the body politic.

Here I speak for no particular denomination, but as a citizen I speak for all denominations that strive to form a correct conscience in men. And I say it is simply statesmanship for government to foster and none, inconsistent with its neutral position,

And if this is true of government, the duty is doubly binding on the great struggling mass of laboring men to respect reweaken its influence. The infldel, the skeptic and the agnostic are your worst enemies. Their principles tend to undermine entirely the religious sentiment and religious truths, and upon, these depend the poor man's only hope. You cannot settle your difficulties by strikes; you cannot settle them by combination minus strikes; you cannot settle them by free trade or by tariff: you cannot settle them by single tax. All these may have a bearing on ecociety that you can imagine the same rontine of governing has to be gone over. And you cannot do away with the question of capital and labor; they are in the nature of things, and so long as gold can buy votes and legislation, the laboring man will be the victim of capital, and gold will have that power wherever religious principles do not form and control men's consciences. These principles seem to me as clear as

the noonday sun. There is, unfortunately, throughout the civilized world a school that is laboring great laboring masses. These attacks are